Review of Plant Pathology

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C·A·B INTERNATIONAL

CAB International (CABI) is an international, intergovernmental organization registered with the United Nations. It is owned and administered by its member governments; these currently number 29, but membership is open to all governments who wish to participate. Established in 1928, the organization provides information, scientific, and development services for agriculture and allied disciplines throughout the world.

Information Services

The main task of the Information Services, located at the CAB International Centre (CABIC) at Wallingford, is the creation of a bibliographic database of research on agriculture, forestry and allied disciplines, including social sciences and aspects of human medicine. Abstract journals derived from the database, and online access to it, provide a unique source of information for research scientists, development planners, educators and students. Subsidiary but growing tasks are the publication of primary journals and reference works, and training information professionals in developing countries.

The Accessions Unit acquires the relevant scientific and technical literature for abstracting by almost 100 scientists/linguists in the following 11 Bureaux:

Agricultural Economics
Animal Breeding & Genetics
Animal Health
Dairy Science & Technology
Nutrition
Pastures & Field Crops
Crop Protection
Horticulture & Plantation Crops
Plant Breeding & Genetics
Soils
Forestry

Further material is acquired and processed by collaborating or contracted organizations. Other staff coordinate work on specialized directories and databanks, and commission new books and primary journals. The Publications Unit is responsible for printing the journals and books, and the Marketing & Sales Division promotes and sells Information Services products and services worldwide.

Scientific Services

CABI's Scientific Services consist of four Institutes and two support services:

CAB International Institute of Entomology (CIE), Director Dr K.M. Harris, located at 56 Queen's Gate, London, and in the British Museum, Natural History.

CAB International Mycological Institute (CMI), Director Professor D.L. Hawksworth, located at Ferry Lane, Kew, London, adjacent to the Royal Botanic Gardens.

CAB International Institute of Parasitology (CIP), Director Dr R. Muller, located at Winches Farm, St. Albans, the field station of the London School of Hygiene & Tropical Medicine.

These three Institutes provide an authoritative identification service for agricultural pests and other organisms, conduct research, implement projects, and provide training in their fields of expertise.

CAB International Institute of Biological Control (CIBC), Director Dr D.J. Greathead, has its headquarters at Silwood Park, Ascot, the field station of Imperial College of Science and Technology, University of London. It has stations in Trinidad and Tobago, Switzerland, Pakistan, Kenya and Malaysia. It provides biocontrol services, conducts training, and participates in integrated pest management programmes.

Development Services (CDS), Head Mr D. Heydon, integrate the broad range of CABI expertise to provide advice and assistance with agricultural problems, but particularly those related to pest management and information services.

Library Services, Manager Mr C.J. Hamilton, have their headquarters with CIBC at Silwood Park, where the main Library is held, with additional literature collections at CMI, CIP, CDS and CABIC. Library Services operate a Document Delivery Service.

Systems

The Systems Division provides computing resources and services to all parts of CABI. It maintains a central computing facility with telecommunications access to seven remote sites, including the four CABI Institutes. CABIC is served by a modern Local Area Network which provides access to the computers, and by advanced office automation facilities. The main computers are DEC VAX systems and the principal software systems are BASIS for data management and PAGER for typesetting and information retrieval.

The staff of 20 includes database production personnel, systems analysts, programmers and computer operators. The principal systems are for the production of the CABI bibliographic database and associated functions, plus accessions control, subscription management and electronic publishing.

CAB INTERNATIONAL INFORMATION SERVICES
PRODUCTS AND SERVICES

Almost 100 scientists/linguists in the 11 Bureaux of CABI's Information Services at Wallingford, UK, with help from associated organizations and individuals worldwide, abstract and index the significant research and development literature in agriculture, forestry and allied disciplines. Over 10,000 serials and many other publications are scanned, and approximately 130,000 bibliographic records are compiled each year. From this computerized database is derived a wide range of information services and products in hard copy and machine-readable form, designed to meet a variety of customer needs.

HARD COPY PRODUCTS

Abstract journals

The following abstract journals on specific disciplines, specialist crops or products, or particular livestock are published, mostly monthly or quarterly. Each has author and subject indexes, cumulated annually in a special issue of the journal.

Animal Science and Production
Animal Breeding Abstracts; Dairy Science Abstracts; Nutrition Abstracts & Reviews, Series B-Livestock Feeds & Feeding; Pig News & Information; Poultry Abstracts.

Veterinary Science and Parasitic Diseases
Helminthological Abstracts; Index Veterinarius; Protozoological Abstracts; Review of Medical & Veterinary Entomology; Review of Medical & Veterinary Mycology; Veterinary Bulletin.

Crop Science and Production
Crop Physiology Abstracts; Faba Bean Abstracts; Field Crop Abstracts; Herbage Abstracts; Horticultural Abstracts; Irrigation & Drainage Abstracts; Maize Abstracts; Ornamental Horticulture; Plant Breeding Abstracts; Plant Growth Regulator Abstracts; Postharvest News and Information; Potato Abstracts; Rice Abstracts; Seed Abstracts; Soils & Fertilizers; Sorghum & Millets Abstracts; Soyabean Abstracts; Sugar Industry Abstracts; Wheat, Barley & Triticale Abstracts.

Forestry
Agroforestry Abstracts; Forest Products Abstracts; Forestry Abstracts.

Crop Protection
Biocontrol News & Information; Nematological Abstracts; Review of Agricultural Entomology; Review of Plant Pathology; Weed Abstracts.

Economics, Development and Sociology
Leisure, Recreation & Tourism Abstracts; Rural Development Abstracts; World Agricultural Economics & Rural Sociology Abstracts.

Machinery and Buildings
Agricultural Engineering Abstracts.

Human Nutrition
Nutrition Abstracts & Reviews, Series A-Human & Experimental.

Biotechnology/Biodeterioration
AgBiotech News & Information; Biodeterioration Abstracts.

Also published is a series of current awareness publications (CAB Prompts) on specific crops. Subject indexes are not provided. Titles in the series so far are: *Groundnuts* and *Chickpeas/Pigeonpeas*. In addition, many retrospective compilations of abstracts (Annotated Bibliographies) on various topics are available on demand.

SDI Service

SDI (Selective Dissemination of Information) is a regular current awareness service based on the most recent input to the database. Subscribers decide their own search profile and receive search results at intervals of their choice, either as computer printout or on floppy discs suitable for most microcomputers. Delivery by airmail.

CAB Alerts

This is a special SDI service providing subscribers each month with the search results from standard profiles chosen by CABI. Numerous titles are available and the list is regularly updated to reflect new subject interests. Output is available on computer printout posted by airmail.

MACHINE-READABLE PRODUCTS AND SERVICES

Online Access

The machine-readable database, known as CAB ABSTRACTS, is publicly accessible online through DIALOG Information Services (USA), BRS Information Technologies (USA), ESA-IRS (Italy), DIMDI (GFR), JICST (Japan), CAN-OLE (Canada) and Tsukuba Daigaku (Japan). The whole database back to 1973 contains over 2 million records. Search aids include the CAB ABSTRACTS Online Manual, the CAB Thesaurus (1988 Edition) and the CAB International Serials Checklist (1988).

CAB ABSTRACTS on Compact Disc

The database is also available on CD-ROM (Compact Disc Read Only Memory). Volume one contains bibliographic citations and abstracts for 1984-86; the second volume contains the 1987-89 data. CD-ROM technology provides an online search capability without the worries of cost or telecommunication problems. An IBM or fully IBM-compatible PC, 640 K RAM, MS-DOS or PC-DOS version 2.1 or higher, and a CD-ROM player are needed. The SPIRS (SilverPlatter Information Retrieval System) software allows maximum search flexibility.

Magnetic tapes

Organizations with access to mini or mainframe computers may lease all or part of CAB ABSTRACTS on magnetic tape. Update tapes are issued monthly, and retrospective tapes as required.

OTHER PRODUCTS AND SERVICES

Document Delivery Service

Photocopies of originals of most articles included in the database are available from CABI Library Services, Silwood Park, Ascot, UK. Documents may also be ordered online via DIALOG's DIALORDER or ESA/IRS's PRIMORDIAL.

Books and serial publications

CABI publishes authoritative reference books, directories and serial publications, the latter including *Bulletin of Entomological Research, Outlook on Agriculture, Index of Current Research on Pigs, Distribution Maps of Pests, Distribution Maps of Plant Diseases, Bibliography of Systematic Mycology, Descriptions of Pathogenic Fungi & Bacteria, Index of Fungi,* and *Systema Ascomycetum*. CABI is a co-sponsor of the International Food Information Service which publishes *Food Science & Technology Abstracts.*

REVIEW OF PLANT PATHOLOGY

Prepared by the

CAB INTERNATIONAL BUREAU OF CROP PROTECTION
in association with the
CAB International Mycological Institute

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The Bureau of Crop Protection also prepares: *Review of Applied Entomology, Series A, Agricultural, Helminthological Abstracts, Series B, Plant Nematology, Weed Abstracts and Plant Growth Regulator Abstracts.*

Review of Plant Pathology

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REVIEW ARTICLE

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Plant pathology in Bhutan by I.D.Firman, W.T.H.Peregrine, Thinlay and Pema Tamang..... 1

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